REMARKS/ARGUMENTS

Claims 2-22 and 29-37 are currently pending in the present patent application.

In a Final Office Action mailed on May 20, 2008, the Examiner maintains her rejections of claims 2-37 under 35 USC § 103(a) as being unpatentable over US Patent No. 5,469,361 to Moyne (hereinafter "Moyne") in view of US Patent No. 5,980,078 to Krivoshein et al. (hereinafter "Krivoshein").

The Examiner continues to assert that Krovoshein discloses a signal database that manages communication between a hardware subsystem and an application service system and a self configuring interface system such that the combination of Moyne and Krovoshein would have been obvious to one skilled in the art because it would be have been desirable for users to implement because it provides the ability to support automatic sensing of devices.

An embodiment of the present invention covered by claim 5 is depicted in Figure 3 of the present application, as previously discussed in the prior amendment, to help the Examiner appreciate certain distinctions between the subject matter of the present application and the applied prior art references. These embodiments will not again be discussed in detail in this response, but the Examiner is referred to these prior discussions to provide helpful context for the following remarks. Briefly, the configuration and initialization module 332 retrieves from the signal database 400 (Figure 1) configuration information describing one or more signal exchange modules 214 within an electrical interface unit 210 (Figure 2) to which the framework services module 330 is coupled. The configuration and initialization module 332 thereafter builds, generates, or retrieves portions of a hardware interface module 350 for communicating with a given signal exchange module 214. The interface may include one or more location identifiers that uniquely specify where the signal exchange module 214 physically and/or logically resides and a communication interface definition for the signal exchange module 214, which may include a port number, interrupt definitions, and/or storage element identifications and/or descriptions. With

this embodiment of the present invention, sensing and/or control subsystems 120 (Figure 1) may be changed at will and the corresponding signal exchange module 214 (Figure 2) modified via the signal database 400 to properly communicate with the subsystems.

Krovoshein discloses no such signal database that stores communications protocol interface configuration information corresponding to a manner of managing communication between the hardware subsystem and the application services system. Krovoshein assumes communication via a predefined in standardized communications protocol. See col. 21, lines 63-67 through col. 22, lines 1-35. All the configuration information discussed therein does not relate to communications protocol information but instead relates to other configuration parameters that are communicated over an assumed predefined standardized communications protocol. For example, an element of the "configuration database" referred to as "Device Tables" are discussed as defining a variety of configuration parameters, such as CAN segment numbers, controller MAC address, IP address, subnet mask, and so on.

Amended claim 5 recites, in part, a system including a hardware subsystem, an application database, a self-configuring application services system, and a signal database storing communications protocol interface configuration information corresponding to a manner of managing communication between the hardware subsystem and the application services system. A self-configuring interface system is coupled to the hardware subsystem and the application services system and includes a configuration module coupled to retrieve interface configuration information from the signal database.

Krovoshein does not disclose or suggest a self-configuring interface system includes a configuration module coupled to retrieve communications protocol interface configuration information from the signal database. Instead, the communication is only through the predetermined communications protocol utilized in the digital control system of Krovoshein. The parameters in the configuration database of Krovoshein are not communications protocol parameters as now expressly recited in amended

11

claim 5.

For these reasons, the combination of elements recited in claim 5 is allowable. Dependent claims 2-4 and 6-11 are allowable for at least the same reasons as claim 5 and due to the additional limitations added by each of these dependent claims.

Independent claim 12 recites a system including a hardware subsystem, an application database referencing a first software object that corresponds to a manner of processing information associated with an electrical signal. A self-configuring application services system includes a configuration module coupled to the hardware subsystem and is coupled to retrieve application service configuration information from the application database, and includes the first software object. A signal database stores communications protocol interface configuration information corresponding to a manner of managing communication between the hardware subsystem and the application services system and references a second software object that corresponds to a manner of processing information associated with an electrical signal and associates an event code with the electrical signal. A self-configuring interface system is coupled to the hardware subsystem and the application services system and includes a configuration module coupled to retrieve interface configuration information from the signal database and the second software object.

Once again, the configuration database of Krovoshein does contemplate storing communications protocol interface configuration information but only stores predetermined communications protocol utilized in the digital control system of Krovoshein.

For these reasons, the combination of Moyne and Krovoshein neither discloses nor suggest the elements recited in claim 12. Dependent claims 13-22 are allowable for at least the same reasons as claim 12 and due to the additional limitations added by each of these dependent claims.

Independent claim 29 recites a method for processing electrical signals in a system including a hardware subsystem that includes a set of components adapted to

carry electrical signals, each electrical signal associated with one from the group of a sensing operation and a control operation. The method includes retrieving application service configuration information that associates a first set of software objects with at least one electrical signal and retrieving the first set of software objects in accordance with the application service configuration information. The method further includes retrieving communications protocol interface configuration information that corresponds to the hardware subsystem and which associates a second set of software objects with at least one electrical signal and automatically generating a hardware interface for managing communication between the software object and the hardware subsystem in accordance with the communications protocol interface configuration information, the interface including associating an event code with each electrical signal.

The combination of Moyne and Krovoshein neither discloses nor suggests retrieving communications interface configuration information that corresponds to the hardware subsystem and which associates a second set of software objects with at least one electrical signal and automatically generates a hardware interface for managing communication between the software object and the hardware subsystem. The configuration database of Krovoshein only includes parameters associated with a predetermined communications protocol utilized in the digital control system of Krovoshein and not parameters for establishing a communications protocol.

For these reasons, the combination of elements recited in claim 29 is allowable and dependent claims 30-37 are allowable for at least the same reasons as claim 29 and due to the additional limitations added by each of these dependent claims.

The present patent application is in condition for allowance. Favorable consideration and a Notice of Allowance are respectfully requested. **Should the Examiner have any further questions about the application, Applicants respectfully request the Examiner to contact the undersigned attorney at (425) 455-5575 to arrange for a telephone interview to discuss the outstanding**

13

issues. If the need for any fee in addition to any fee paid with this response is found, for any reason or at any point during the prosecution of this application, kindly consider this a petition therefore and charge any necessary fees to Deposit Account 07-1897.

Respectfully submitted,

GRAYBEAL JACKSON HALEY LLP

/Paul F. Rusyn/

Paul F. Rusyn
Registration No. 42,118
Attorney for Applicants
155 – 108th Avenue NE, Suite 350
Bellevue, WA 98004-5973
(425) 455-5575 Phone
(425) 455-5575 Fax